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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/913,811	09/24/1997	HIROKAZU SUGIHARA	356972020100	7552

25226 7590 11/19/2003

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EXAMINER	
BASKAR, PADMAVATHI	
ART UNIT	PAPER NUMBER
1645	leo

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No. 08/913,811	Applicant(s) SUGIHARA ET AL.	
	Examiner Padmavathi v Baskar	Art Unit 1645	

--The MAILING DATE of this communication appears on th cover sheet with th correspondence address --

THE REPLY FILED 3/6/03 and 6/30/03 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☒ A Notice of Appeal was filed on *30 June 2003*. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *see attached note*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *NONE*.

   Claim(s) objected to: *NONE*.

   Claim(s) rejected: *12,14 and 16*.

   Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *attached not .*

Advisory Action

1. Applicants' arguments filed on 3/06/03 have been entered. However, the application is not in condition for allowance.

2. The rejection of claims 12, 14 and 16 under 35 U.S.C. 103(a) as being unpatentable over Gahwiler et al (Neuroscience, 1982, 7; 1243-1256) in view of Gross et al. (J. of Neuroscience Methods 5: 13-22, 1982) is maintained as set forth in the previous office action.

Applicant states that Gahwiler do not measure a chronic effect (i.e., of test compound) on tissue sample but teaches measurement of cell potentials from rat hippocampus that has been cultured using the roller-tube technic and Gross does not teach neural tissue sample but teaches disassociated neurons on a multi-electrode plate.

It is the examiner's position that the term "chronic" is a relative term without any lower boundaries and is not defined either by the claim or by the specification. Gahwiler uses neural tissue and Gross suggests the apparatus disclosed is obviously designed for long-term cultures. Therefore, the teachings of prior art established a prima facie obviousness. The examiner has clearly established a prima facie obviousness using the basic criteria, suggestion and reasonable expectation of success. Gahwiler et al 1982, teach a method of testing the effect of chemical substances (acetylcholine) on neuronal tissue (hippocampal sections) and measuring the electrical properties (see experimental procedures on page 1243 and 1244) before and after addition of said substances (see results and figures). The term "chronic" is not defined by the claim; the specification does not provide a standard for ascertaining the requisite degree. Therefore, the prior art teaches a method of testing the chronic effect of compounds in a neural tissue culture. Further, Gross et al teach an apparatus (see material and methods/figures) and a method for observing a physical and chemical property of a tissue or cells comprising providing photoetched electrodes integrated into the floor of a tissue culture chamber (i.e.

providing a substrate with planar electrodes disposed on the same plane as the substrate) and a method of cell culturing means. (page 13).

Gross et al teach recording the electrophysiological potentials with electrodes integrated into the tissue culture plate would allow the long term monitoring of neuronal activity. The examiner is aware that Gross did not use tissue but the claims are rejected under 35 U.S.C. 103 and not under 35 U.S.C. 102. Therefore, it would have been prima facie obvious to one of ordinary skill in the art at the time that the invention was made to use the apparatus in a method designed by Gross to teachings of Gahwiler et al to measure the electrical properties before and after addition of chemical substances to neural tissue sample because Gross et al suggests that the apparatus disclosed is obviously designed for long term cultures. The motivation to use this apparatus and a method to achieve the obvious benefits is clearly suggested by Gross (see page 21, last paragraph). Thus the teachings of the prior art make the claimed invention obvious. Therefore, this rejection is maintained.

2. The rejection of claims 12, 14 and 16 under 35 U.S.C. 103(a) as being unpatentable over Gahwiler et al (Neuroscience, 1982, 7; 1243-1256) in view of Giaever et al 1993 (U.S.Patent 5,187,096) is maintained as set forth in the previous office action.

Applicants' arguments filed on 3/06/03 have been fully considered but they are not deemed to be persuasive.

Applicant states that Gahwiler do not measure a chronic effect (i.e., of test compound) on tissue sample but teaches measurement of cell potentials from rat hippocampus that has been cultured using the roller-tube technic and Giaever et al (U.S.Patent 5,187,096) do not teach a device that measures an electrical property of tissue.

The Gahwiler has been discussed supra. The examiner is aware that Giaever did not use tissue but the claims are rejected under 35 U.S.C. 103 and not under 35 U.S.C. 102.

Therefore, the teachings of Gahwiler using a neural tissue for measuring the effect of compound in a method by using Giaever apparatus makes the claimed invention obvious over the prior art as explained. Therefore, the rejection is maintained.

3. The examiner encourages the applicant to review M.P.E.P. §821.04 and *In re Ochiai*, 71 F.3d 1565, 37 USPQ2d 1127 (Fed. Cir. 1995) and *In re Brouwer*, 77 F.3d 422, 37 USPQ2d 1663 (Fed. Cir. 1996 because the applicant has bee issued a patent for product, apparatus.

4. No claims are allowed.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Padma Baskar whose telephone number is (703) 308-8886. The examiner can normally be reached on Monday through Friday from 6:30 AM to 4 PM EST

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith, can be reached on (703) 308-3909. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Padma Baskar Ph.D.

MARK NAVARRO
PRIMARY EXAMINER